Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	
and Their Impact Upon the	)	MM Docket No. 87-268
Existing Television Broadcast	)	
Service	)	

FCC 96-207 -- FIFTH FURTHER NOTICE OF PROPOSED RULE MAKING

COMMENTS OF

ACM SIGGRAPH
1515 Broadway
New York, NY 10036

July 10, 1996

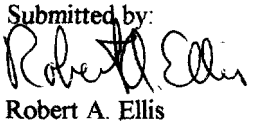
ACM SIGGRAPH files these comments on July 10, 1996, in the FCC's Fifth Further Notice Of Proposed Rule Making in the matter of Advanced Television Systems, MM Docket No. 87-268.

ACM SIGGRAPH is the Special Interest Group on Computer Graphics of the ACM. Our membership consists of approximately seven-thousand professionals representing all aspects of computer graphics technology and applications.

Our primary comment consists of a copy of a letter written on behalf of ACM SIGGRAPH by Thomas DeFanti to Robert Sanderson dated October 18, 1993 (copy attached). The comments expressed in the letter regarding the desirability of progressive scan to support the graphics information on the NII are still valid.

What has changed is that the NII of three years ago has now become the Global Information Infrastructure (GII) whose graphics interface, the World Wide Web, has been responsible for millions of consumers gaining access to this communications medium of the future. If anything, compatibility with the graphics data on the GII has become even more essential in support of the convergence of television and computing that is rapidly occurring in the consumer products industry.

Submitted by:



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July 10, 1996

ACM SIGGRAPH

Special Interest Group on Computer Graphics

October 18, 1993

Robert Sanderson
Chairman, Joint Experts Group on Interoperability
Eastman Kodak Co.
Bldg 5, 4th Floor
1447 St. Paul St.
Rochester, NY 14653-7102

Dear Mr. Sanderson:

As you know, I represented ACM SIGGRAPH at last week's ACATS Interoperability Review in Washington D.C. I found the meeting to be extremely informative.

The ACM SIGGRAPH committee on ATV is adamantly opposed to any form of interlace digital HDTV output on consumer-level devices. We believe that progressive scan devices are the only feasible displays for information coming from the National Information Infrastructure (NII) and other computer-based services. We do not believe that interlace sets can be used in this context because one would either have to view a display with horrible interlace flicker (which is enough to make one turn one's head away) or halve the vertical resolution, yielding an impractical 32x9 aspect ratio for text and computer-generated image use. Furthermore, we believe that an interim standard allowing interlace would greatly impair the access to the NII by the segment of Americans who cannot afford both a computer display and a digital HDTV set. Thus, we are firmly against any interlace standard for even an interim period.

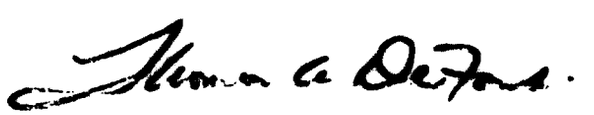
The Grand Alliance does not directly address the NII compatibility issue other than to point to the optional other progressive standards it is embracing. Allowing any interlace option is tantamount to eliminating the other options for our lifetimes, since a cheaper, non-compatible standard is embraced and produced first. The computer community I represent has spent the past 20 years suffering with the incompatibility of interlace television and computers. Now is the time to fuse computing and television by adopting progressive scan as the one acceptable method of display.

Requiring progressive scan on a consumer set does not, however, necessitate progressive scan cameras or broadcast. The consumer set will have enough memory inside it to scan out video in any way from signals received in any order. The consumer set simply has to display in progressive format so that it doesn't flicker unacceptably with NII-type information. Virtually all computers put out progressive scan and, eventually, cameras and broadcast equipment will follow. Consumer

video cassette recorders (VCRs) could similarly feed a variety of compression techniques (including interlace) into progressive scan consumer sets, although interlace would destroy or cause any NII-type information to flicker.

We believe that achieving consensus on progressive scan and NII compatibility is so critical that any additional time spent debating the issue is well worth it. We urge you to continue the debate in good faith and examine all the issues, including new ones brought up last week. This is not a time for haste.

Sincerely,



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